Think 53: Food Talks
Dan Jurafsky & Yoshiko Matsumoto

Sweetness and Power

Thursday, May 11, 2017
Sidney Mintz (1922-2015)

Anthropologist
Studied the Caribbean
Pioneer in anthropology of food
Life history of Anastacio Zayas Alvarado, a Puerto Rican sugar worker
The article you read

Was an early Mintz lecture that led to *Sweetness and Power*
Sweetness and Power: The Place of Sugar in Modern History

“This measured, intelligent, ambitious book has something for everybody... Mintz opens a whole series of doors onto rich and unsuspected worlds.”

Sweetness AND POWER

The Place of Sugar in Modern History

Sidney W. Mintz
Why Mintz?

Before Mintz
Food was simply not a legitimate object of academic study
M.F.K. Fisher (1908-1992)

In 1963, W. H. Auden called her "America's greatest writer."

Wrote 15 books

Hundreds of New Yorker stories

Photographed by Man Ray
My favorite writer: M.F.K. Fisher

"People ask me: Why do you write about food, and eating and drinking? Why don't you write about the struggle for power and security, and about love, the way others do?"

"...when I write of hunger, I am really writing about love and the hunger for it, and warmth and the love of it and the hunger for it."
Saying "I'm really writing about love, not food", that's a copout
Why apologize for writing about food?"
M.F.K. Fisher

My subject matter "caused serious writers and critics to dismiss me for many, many years. It was woman's stuff, a trifle."
Mintz as revolutionary

Before Mintz, food was considered a "trifle"

Mintz showed that the study of food is absolutely central to history and the social sciences.

Showed that hidden behind everyday objects or foods were enormous questions about power and status
Mintz: Why Study Sugar?

“Sugar…has been one of the massive demographic forces in world history.

"Because of it, literally millions of enslaved Africans reached the New World...This migration was followed by those of East Indians...Chinese, Portuguese, and many other peoples. ...Sugar brought a dozen different ethnic groups in staggering succession to Hawaii, and sugar still moves people about the Caribbean."

Why sugar?

The history of sugar tells us about

- Power
- How ideas are borrowed across cultures
- Economic influence on cultural change
- Social status
- How food and culture acquires symbolic meaning
Mintz: Mystery of Sugar Consumption

Why the massive rise in European consumption of sugar?

Britain, annual per capita consumption:

1704: 4 lbs
1800: 18 lbs
1900: 90 lbs
Etymology as a clue: Sugar in the Oxford English Dictionary

**Etymology:** < Old French çucre (12–14th cent.), çuquere, zuchre, sukere, north-east. chucre , modern French sucre (from 13th cent.), = Provençal sucre , Italian zuccherò , < (probably through Old High German) medieval Latin zuccarum , succarum , < Arabic sukkar (with prefixed article assukkar , whence Spanish azucar , Portuguese assucar ). The relation of Arabic sukkar to Greek σάκχαρον , σάκχαρ (whence Latin saccharon , saccharum n.), Persian shakar , Sanskrit śarkarā (Prakrit sakkara ) ground or candied sugar, originally pebble, grit (compare jaggery n.), is not clear
Etymology as a clue: Candy in the Oxford English Dictionary

**Etymology:** < French *candi* in *sucre candi* ; compare Italian *zucchero candi* (found, according to Littré, in an Italian author of 1310), Spanish *azucar cande* , Portuguese *assúcar candi* , medieval Latin *saccharum candi* ; < Arabic, originally Persian *qand* sugar, the crystallized juice of the sugar-cane (whence Arabic *qandah* candy, *qandī* candied); of Indian origin, compare Sanskrit *khanda* ‘piece’, also ‘sugar in crystalline pieces’, < *khand* to break. As in the other languages, the full *sugar candy* (sugar-candy n.) appears much earlier than the simple *candy*. 
Sweetness and Power: Sugar Production
Sugar cane
Saccharum officinarum L.

8000 BCE Domesticated New Guinea
6000 BCE Spreads to Philippines and India
400 BC. Sanskrit Mahabhashya of Patanjali, early linguistics work, mentions
  ◦ Rice pudding with milk and sugar
  ◦ Barley meal and sugar
  ◦ Fermented drinks flavored with ginger and sugar
How sugar produced since ancient times

Mintz calls it “a series of liquid-solid operations”
- Cane is chopped
- Cane is then ground, pressed pounded or soaked in liquid
- Heating the liquid causes evaporation and concentration
- Crystals appear

Sugar is extremely labor-intensive:
- must be cut when the cane is ripe, and ground as soon as it is cut
Sugar in the Moslem world

Widespread by the 9th century
Sugar spreads to Christian Europe

Sugar cane planted in Atlantic islands
  ◦ Canary islands, Madeira, Cape Verde, etc

Portuguese slave raids on West Africa, force slaves to grow, cut, and mill sugar cane
1493 Columbus brings sugar cane to the New World

By 1526 Brazil shopping sugar to to Lisbon in commercial quantities

1515 Sugar masters come from Canary Islands to Santo Domingo, (modern Dominican Republic) in 1515

British settle Barbados in 1627, take Jamaica in 1665, and plant sugar plantations and begin to import slaves to produce sugar
Reminder from High School: Triangles of Trade

1600s-1700s

1. Finished goods sold to Africa, African slaves to Americas, American tropical commodities (sugar) to mother country and importing neighbors

2. New England rum to Africa, slaves to West Indies, molasses back to New England (to make rum)
Numbers

Eltison and Richardson “Trans-Atlantic Slave Trade Database”

12.5 million Africans shipped to New World
10.7 million survived passage
Example: Slavery in the Caribbean

From 1701 to 1810

Barbados (166 square miles)
- 252,500 Africans as slaves

Jamaica
- 662,400 Africans as slaves
Volume and Direction of Slave Trade to the Americas

Ellis & Richardson, Atlas of the Transatlantic Slave Trade
Slavery ends in Caribbean

1838 English colonies
1848 French
1876 Puerto Rico
1876 Cuba
Post-slavery immigration

Mintz “This migration was followed by those of East Indians...Javanese, Chinese, Portuguese, and many other peoples in the nineteenth century. It was sugar that sent East Indians to Natal and the Orange Free State, sugar that carried them to Mauritius and Fiji. Sugar brought a dozen different ethnic groups in staggering succession to Hawaii, and sugar still moves people about the Caribbean.”

Example: Hawaii: indentured plantation workers

- By 1900: 60,000 Japanese, 46,000 Chinese had immigrated
- 1907-1931: 120,000 Filipinos
- 20% of people born in Hawaii have some Japanese ancestry
Modern sugar production

1942 U. S. Sugar indicted for enslaving African-American cane workers in Florida

1989 Wilkinson “Big Sugar” suggests 10,000 Jamaican sugar workers in Florida still treated like slaves
Modern sugar production

2001: Haitian sugar workers in Dominican Republic, including work for US-owned Central Romana: UN calls it “one of the most widely documented instances of coercive labour contracting over the past two decades.”

Sugar workers home shack
Sweetness and Power: Sugar Consumption
Mintz: Mystery of Sugar Consumption

Why the massive rise in European consumption of sugar?

Britain, annual per capita:
- 1704: 4 lbs
- 1800: 18 lbs
- 1900: 90 lbs

Mystery:
- Can’t (only) be universal desire for sweetness
- This rise was much smaller in France
- Didn’t happen in China, despite vast local sugar production
European sugar consumption repeatedly draws on borrowings from Muslim world
Persia long history of sugar, drawn from link with India

Remember Herodotus 5th century BCE talking about the Persians:

[The Persians] have few solid dishes, but many served up after as dessert [“epiphorēmata”], and these not in a single course; and for this reason the Persians say that the Hellenes leave off dinner hungry, because after dinner they have nothing worth mentioning served up as dessert, whereas if any good dessert were served up they would not stop eating so soon.
Sugar in the 9th century Persia, Iraq, Turkestan

Manuscript from Iraq *Al-Tabassur bi-l-tigara*: Concerning Clarity in Commercial Matters

- Production of sugar from cane in Persia, Turkestan
- Sweet sugar cane carried from Khiva, in Khwarizm;
- Sugar candy from Ahwaz
- Fruit syrups, quince, saffron from Isfahan,
- Rosewater, syrups, water-lily ointment, and jasmine ointment from Shiraz.
These all make it to the Arab world

Candies like *lauzinaj*, ancestor of macaroons and marzipan

Pound together finely
- 1 pound sugar
- ⅓ pound almonds

Dissolve on a quiet fire
- ⅓ pound sugar
- ½ ounce rose water

When cooled, combine, knead together.

Wrap in fine dough
- Soak in sesame oil and rose-water syrup

Reconstructions by Helmut W. Klug
Arabic pharmacology

**Syrup** (Arabic *shurba*): “a juice concentrated to a certain viscosity so that when two fingers were dipped into it, it behaved as a semi-solid when the digits were opened….sugar added as … sweeteners”

**Rob** (Arabic *rubb*): fruits and flower petals immersed in hot water to which sugar was added and the whoel preapaton is boiled down until concentrated

**Julep** (Arabic *julab*, from Persian “gul+ab”, “rose+water”): less thick than the rob, frequently with sugar.

+ *lohochs, decoctions, infusions, fomentations, powders, electuaries, hieras*, etc etc.

Sugar used in every category.

Medieval Pharmacists Manual


A Jewish pharmacists manual from 1260 CE

*Minhaj al-dukkan wa-dustur al-a`yan fi a`mal wa-tarakhib al-adwiya al-nafi`a lil-insan*

‘The management of the [pharmacist’s] shop and the rule for the notables on the preparation and composition of medicines beneficial to Man’
Manuscripts in the Cairo Genizah

300,000 Jewish manuscript fragments
Found in the genizah (storeroom) of a synagogue in Cairo
One of the largest collections of medieval manuscript in the world

Genizas: warehouses for worn-out sacred writings
• Jewish tradition not to destroy religious texts
• Extended to anything written
• Contained everything written by the community for 300 years, 11-14th C.

Solomon Schechter studying fragments from the Genizah in the Cambridge Library
A recipe from the pharmacist’s manual


*Rhubarb syrup*

Opens liver obstruction and strengthens the liver. Take twenty dirhams of rhubarb, sprinkle over it three ratls of water for a day and a night and simmer over a low fire and thicken with three ratls of hard loaf sugar. Let it reach the consistency of syrups, remove and use.
Fruit pastes and syrups and powders

• Quince paste spread from Cairo as far west as Muslim Andalusia

• Appears in a thirteenth-century cookbook manuscript in Andalusia
Arabs come to Europe

By 965 Sicily ruled by Arabs from Ifriqiya (modern Tunisia)

- Palermo one of largest cities in the world

Sugar and other new foods introduced to Europe:
Ways that sugar entered European consumption

• In medicine and spice
• As sculptures (“subtleties”)
• In jams, pastes, syrumps
• In tea and coffee
• In fruit drinks
• In frozen desserts
Mintz generalization

• In each case, sugar starts as a glamorous luxury
• Then works its way down to the middle class
• And then the poor
First: Linguistic cues to the rise of sweetness: Shakespeare vs. Chaucer

Chaucer: very few mentions of sugar

Shakespeare: “sweet” a favorite adjective

◦ Touchstone in As You Like It:
  ◦ “honesty coupled to beauty is to have honey a sauce to sugar”

◦ Loves Labour’s Lost:
  ◦ Berowne: “One sweet word with thee”
  ◦ Princess: “Honey, and milk, and sugar; there is three”
Sugar spreads to Europe first as medicine and spice

Used consistently in early apothecary manuals

An early expression meaning “missing something essential”:
- “Like an apothecary without sugar”
- “C'est comme un apothicaire sans sucre”
Sugar used as spice in small quantities

1226 Henry III requests mayor of Winchester
   To get him 3 pounds of Egyptian sugar
   “If there was that much to be bought at one time”.

Sugar often combined as a spice with other spices (cloves, nutmeg, etc.)
   ◦ Used indiscriminately on fish and meats
   ◦ Or in spicy drinks

This reaches a peak in 1600s
   ◦ before sugar becomes an ingredient rather than a spice
We still use sugar combined with medieval spices

In holidays

- Thanksgiving yams with brown sugar, cinnamon
- Holiday cookies with sugar, ginger, cinnamon, even pepper
- Ducks and geese with fruit jams, brown sugar, with cloves

Mintz:
"Holidays often preserve what the everyday loses"
Sidenote: holidays preserving the everyday

http://www.slate.com/articles/life/food/2016/05/allrecipes_reveals_the_enormous_gap_between_foodie_culture_and_what_americans.html

• Allrecipes.com the most popular English-language food website in the world, recipes from home cooks:
  • Boilermaker Tailgate Chili
  • Apple Pie by Grandma Ople
  • Baked Chicken Teriyaki
  • Chicken Enchiladas II
  • Awesome Broccoli-Cheese Casserole
• “My mom used to make this easy recipe every Thanksgiving when I was little…Even though I rarely cook with canned condensed soups, I still make this yummy broccoli casserole during the holiday season.”
Fruit pastes and syrups and powders

- Quince paste spread from Cairo as far west as Muslim Andalusia
- Appears in a thirteenth-century cookbook manuscript in Andalusia
Quince in Latin

Late Latin *malomellum* quince or sweet apple

→

Spanish membrillo quince

Portuguese marmelo quince
Marmalade

Marmalade meant “quince paste” in America until the 1800s.

Here’s Amelia Simmons’s 1796 American Cookery, the first American cookbook:

To make Marmalade.

To two pounds of quinces, put three quarters of a pound of sugar and a pint of springwater; then put them over the fire, and boil them till they are tender; then take them up and bruize them; then put them into the liquor, let it boil three quarters of an hour, and then put it into your pots or saucers.
About same time in England, marmalade slowly shifts to oranges

1760s:

To Make Orange Marmalade
Take the largest best Seville oranges, take the same weight of single refined sugar; grate your oranges, then cut them in two, and squeeze out the juice; throw away the pulp; cut down the skins as thin as possible, about half an inch long; put a pint of water to a pound of sugar; make it into a syrup . . . put in your rinds and gratings, and boil it till it is clear and tender; then put in your juice, and boil it till it is of a proper thickness . . .
Jams become more common

Price of sugar drops in the 1800s
  ◦ Abolition of sugar duties

By the 1870s there were cheap jams everywhere

Jam, once a luxury, becomes a necessity
  ◦ Bread-and-jam and tea becomes a standard meal for the working class
Sugar as "subtlety"

Modern subtlety: reproduction from recent Getty Museum exhibit
Sugar as subtlety

Sugar used as sculptures for the rich; subtleties

- Animals, objects, buildings
- Idea of sugar/marzipan sculptures borrowed from Muslim world
- Sultan of Egypt 1040 CE used 73,300 kilos of sugar at Ramadan including an entire tree made of sugar.

Decorations between courses

- Royal French feasts in 13\textsuperscript{th} century
- 1403 wedding of Henry IV + Joan of Navarre
A sotylte of Syent Edwarde and Seynt Lowys armyd, and upon eyther his cote armoure, holdynge atwene them a figure lyke unto kynge Henry, standynge also in his cote armour, and a scripture passynge from them both, sayinge “beholde ii. Parfight kinges under one cote armour
Subtleties move down the class hierarchy

16th century: merchants too had subtleties at their banquets
Wedding cakes influenced by subtleties

Fancy sugared cakes originally only for royals and wealthy

Slowly these also move down the class hierarchy

1760, Hannah Glasses’s Confectionary Cookbook

- Pastries, desserts become available for the middle class
Subtleties and Modern Art
Kara Walker (1969-)

American artist

Her work addresses the history of American slavery and racism

Using shocking and difficult imagery

Known for her provocative cut-paper silhouettes
Kara Walker’s 'A Subtlety, or the Marvelous Sugar Baby'

A massive, sugar-coated Sphinx-like woman

In a former Domino Sugar Factory in Williamsburg
Kara Walker’s “A Subtlety”
Kara Walker

"I was reading this book, *Sweetness and Power* ...
Walker's A Subtlely
Sugar in drinks and frozen concoctions
Back in Medieval Times: Syrups in Persia

Syrups extracted from rose petals or orange blossoms, or fruits like sour cherry or pomegranate.

Called *sharbat* in Farsi

Combined with water cooled by snow/ice brought down from mountains

Ottomans adopted these *sharbat*, pronouncing them *sherbet* in Turkish
**Lime Syrup (Sharbat-e ablimu)**

Lime Syrup (Sharbat-e ablimu)

6 cups sugar
2 cups water
1 1/2 cups fresh lime juice

Garnish:

Springs of fresh mint Lime slices

In a pot, bring the sugar and water to a boil. Pour in the lime juice and simmer over medium heat, stirring occasionally, for 15 minutes. Cool, pour into a clean, dry bottle, and cork tightly.

In a pitcher, mix 1 part syrup, 3 parts water, and 2 ice cubes per person. Stir with a spoon and serve well chilled. Garnish with sprigs of fresh mint and slices of lime.
Sharbats come to Europe

French naturalist Pierre Belon in 1553

- sherbets in Istanbul made of figs, plums, apricots, and raisins, usually sour, with lemon or vinegar.

“In Turky they keep them in Powder like Sugar: That of Alexandria, which is the most esteem’d throughout this large Empire, and which they transport from thence every where, is almost all in Powder. They keep it in Pots and Boxes; and when they would use it, they put a Spoonful of it into a large glass of Water.”
100 years later, 1670, Sharbats are everywhere in Europe!

London coffeehouse Morat’s in Exchange Alley ad:
- “sherbets made in Turkie of Lemons, Roses, and Violets perfumed.”

In France, sherbets were the business of the guild of limonadiers,
- In charge of lemonades, iced waters, ices of fruits, sherbets, and coffee.
But sherbet/sorbet now means something frozen

How did it change from “sugared fruit syrup, served cold” to sorbet or sherbet?

Another tangent: history of ice cream
Saltpeter $\text{KNO}_3$

9th century, Tang dynasty China: gunpowder invented by mixing saltpeter ($\text{potassium nitrate KNO}_3$) with sulfur and coal.

Process of purifying saltpeter perfected in Syria

1242 Damascus physician Ibn Abi Usaybia discovers:

- Saltpeter added to water turns the water cold
- Called “Chinese snow” in Arabic
- Dissolving $\text{KNO}_3$ in water is endothermic (takes energy to breaks the bonds between the potassium and nitrate ions)
- Enough to chill (but not freeze) fruit juices or milk
Sharbats in the 16th C Mughal empire

Mughals: Turkic speakers from central Asia, conquered northern India

*Mughal Emperor Akbar, 1542–1605*

- Akbar’s Persian-speaking court at Agra
- Center of relative religious tolerance where Sanskrit works translated into Persian.
- But hot!
Sharbats in the 16th C Mughal empire

Drinks were cooled by spinning goglets in saltpeter-water

Saltpetre, which in gunpowder produces the explosive heat, is used by his Majesty as a means for cooling water, and is thus a source of joy for great and small . . . One sér of water is then put into a goglet of pewter, or silver, or any other such metal, and the mouth closed. Then two and a half sér of saltpetre are thrown into a vessel, together with five sér of water, and in this mixture the goglet is stirred about for a quarter of an hour, when the water in the goglet will become cold.
Saltpeter refrigeration moves to Europe

1550 Blas Villafranca, a Spanish physician working in Rome

Methodus Refrigerandi ex Vocato Sale Nitro Vinum Aquamque ("Method for Cooling Wine and Water with Saltpeter")

Says this saltpeter bath had become the common method of cooling wine in Rome.
The cleansing of saltpeter

• *Saltpeter, powdered, or the cleansing of Saltpeter, called vulgarly Salazzo.*
  • i.e. the residue from cleaning saltpeter, which was mostly salt.

• Then by 1650, Neapolitans combine liquid Ottoman sherbets with new salt-and-ice technology

• Sorbet invented
  • Application to cream followed soon after.

• By 1665 the English chemist Robert Boyle said that “a Mixture of Snow and Salt” was the method “much employ’d” in Italy to chill drinks and fruit, “though little known, and less us’d here in England.”
1670s: first ice cream recipe in English

English royal recipe for ice cream

Take a fine pan Like a pudding pan 1/2 a 1/4 of a yard deep, and the bredth of a Trencher; take your Creame & sweeton it wth Sugar and 3 spoonfulls of Orrange flower water, & fill yor pan 3/4 full . .
Popularization

Ice creams and sherbets slowly move from royal banquets to everyday use
Back to those sharbat fruit powders and syrups

Also contained various kinds of fruit acids (tartaric acids, citric acid, malic acids).

Persian and Arab chemists of the eighth to tenth centuries.

- Distilled tartaric acid from wine-making residue,
- citric acid from citrus
Tartaric, citric, malic acids

Used in pharmacies in Europe and US as well
19th century drugstore patent syrup with these acids
Lead to Coke, Pepsi, 7-up, Dr. Pepper
Descended from those Cairo pharmacy syrups.
Back to those sharbat fruit powders and syrups

From Coca-Cola’s website:

...on May 8, 1886... Dr. John Stith Pemberton, a local pharmacist, produced the syrup for Coca-Cola, ...Jacobs' Pharmacy ...placed on sale for five cents a glass as a soda fountain drink.

Jacobs' Pharmacy in Atlanta, circa 1900.
Sugar &: Tea, Chocolate, Coffee

The rise of tea, chocolate, and coffee at the same period

Initially expensive imports drunk only by the wealthy

All tropical products that began to expand in usage exactly as sugar was becoming more available.

◦ All three are stimulants that increased productivity in workers
◦ All three are naturally very bitter and can be drunk with lots of sugar
The rise of tea in Britain

The poor used to drink beer and milk

Malt becomes expensive, and the tea and sugar become progressively cheaper as supply increases

- 1784 duties on tea are lowered

The poor begin to drink tea with sugar instead of small (low-alcohol) beer
Summary of the decline in status

1400-1650 just for the wealthy
1750-1850 rise of tea with sugar, beginning of popularization
1850- beginning of mass consumption as price of sugar drops
  ◦ After 1850 biggest consumers are the poor; before that it as the rich
  ◦ Final transformation of sugar from a preciosity into a daily commodity
Mintz: Decline in symbolic importance of sugar

As it increases in economic and dietary importance, sugar drops in symbolic value

- Large number of people were now familiar with it
- The existence of many cheap forms of sugar (molasses and cheap brown sugar)
- Reduced sugar’s status as glamorous luxury

But sugar still retains some luxury connotations

- Sugar is still a sign of ritual/ceremony
- As it moved down the hierarchy, kept those meanings
- Still used for gifts, at weddings, Christmases, funerals
- Sugar has a symbolic weight that was preserved.
“tobacco, sugar, and tea were the first objects within capitalism that conveyed with their use the complex idea that one could become different by consuming differently”
Mintz: Some causes for the rise in sugar consumption

With the rise of the factory system in Britain, women and men both working, need to save time and fuel
  ◦ Bread-and-jam and tea are the fast foods of their day,
  ◦ Replacing broths and oatmeal simmering in the house
  ◦ Hot tea replaces hot meals

Sugar is calorie-rich: “possible to raise the caloric content of the proletarian diet without increasing proportionately the quantities of meat, fish, poultry, dairy”

“Connected to England’s fundamental transformation from a hierarchical, status-based medieval society to a social-democratic, capitalist, and industrial society.”
Think about these questions while you watch the Niki Nakayama episode

_Niki Nakayama Profile_

What does NN say about herself as a person and as a cook?

What does she say about her cooking?

How do other people describe NN?

- Food critics, her mentor, her family, her partner

Are the descriptions above gendered?

How are NN and NN’s cooking labeled?
Sweetness and Power

The history of sugar tells us so much about

- Power and status
- How ideas are borrowed across cultures
- Economic influences on cultural change
- How food (and culture) acquires symbolic meaning